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Application Number 09/125,635

G1 wherein binding of the compound to the polypeptide indicates that the compound may inhibit ER-dependent transcription.

15. (Reiterated) The method of claim 14, wherein the AIB1 polypeptide comprises an amino acid sequence as set forth as SEQ ID NO: 2.

16. (Reiterated) The method of claim 14, wherein the AIB1 polypeptide comprises an amino acid sequence as set forth as SEQ ID NO: 3.

5 18. (Twice Amended) A method of identifying a candidate compound which may inhibit estrogen receptor-dependent transcription comprising:
contacting the AIB1 polypeptide of claim 12 and an estrogen receptor polypeptide with the compound and

G2 determining the ability of the compound to interfere with the binding of the estrogen receptor polypeptide with the AIB1 polypeptide,

wherein interference of the binding of the estrogen receptor polypeptide and the AIB1 polypeptide indicates the compound may inhibit estrogen receptor dependent transcription.

6 19. (Twice Amended) The method of claim 18, wherein the AIB polypeptide further comprises SEQ ID NO: 2.

7 20. (Twice Amended) The method of claim 19, wherein the AIB polypeptide further comprises SEQ ID NO: 3.

55. (Reiterated) An isolated DNA comprising a sequence encoding a AIB1 polypeptide comprising SEQ ID NO: 8, wherein the polypeptide acts as co-activator of an estrogen receptor.

56. (Reiterated) The isolated DNA of claim 55, wherein the AIB1 polypeptide is a human AIB1 polypeptide.

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57. (Reiterated) The isolated DNA of claim 55, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 4.

58. (Reiterated) The isolated DNA of claim 55, wherein the polypeptide further comprises the amino acid sequence of SEQ ID NO: 2.

59. (Reiterated) The isolated DNA of claim 55, wherein the AIB1 polypeptide further comprises the amino acid sequence of SEQ ID NO: 3.

Please cancel claims 61-62.

64 13 ~~63~~. (Thrice Amended) An isolated polynucleotide comprising a nucleic acid sequence set forth as (a) SEQ ID NO: 1, (b) a degenerate variant thereof, or (c) the complement thereof.

64. (Reiterated) The isolated DNA of claim 55, operably linked to a promoter.

65. (Reiterated) An isolated host cell comprising the DNA of claim 55.

Please cancel claims 66-68.

69. (Reiterated) An isolated polynucleotide having at least 90% homology to SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that acts as a co-activator of an estrogen receptor.

70. (Reiterated) The isolated polypeptide of claim 12, wherein the polypeptide further comprises SEQ ID NO: 2.

71. (Reiterated) The isolated polypeptide of claim 12, wherein the polypeptide further comprises SEQ ID NO: 3.

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72. (Reiterated) The isolated polypeptide of claim 70, wherein the polypeptide further comprises SEQ ID NO: 3.

73. (Reiterated) The isolated polypeptide of claim 12, wherein the polypeptide comprises SEQ ID NO: 4.

65 21/74. (Amended) An isolated polypeptide fragment of SEQ ID NO: 4, wherein the polypeptide fragment comprises SEQ ID NO: 8, and wherein the polypeptide fragment binds the estrogen receptor.

Please cancel claim 75.

74. 76. (Reiterated) An isolated nucleic acid sequence encoding the polypeptide of claim

Please cancel claim 77.

73. 78. (Reiterated) An isolated nucleic acid sequence encoding the polypeptide of claim

24/79. (Amended) The isolated nucleic acid encoding the polypeptide of claim 83, wherein the nucleic acid comprises a sequence set forth as SEQ ID NO: 1.

Please cancel claim 80.

81. (Reiterated) An isolated polynucleotide comprising a sequence set forth as SEQ ID NO: 1, a degenerate variant thereof, or the complement thereof.

Please cancel claim 82.

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83. (Reiterated) The isolated polynucleotide of claim 69, wherein the polynucleotide has at least 95% homology to SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that acts as a co-activator of an estrogen receptor.

84. (Reiterated) The isolated polynucleotide of claim 69, wherein the polynucleotide has at least 98% homology to SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that acts as a co-activator of an estrogen receptor.

85. (Reiterated) An isolated polypeptide encoded by the polynucleotide of claim 83.

86. (Reiterated) An isolated polypeptide encoded by the polynucleotide of claim 84.

67 30/87. (Amended) An isolated polynucleotide comprising a nucleic acid sequence encoding a polypeptide comprising SEQ ID NO: 8, wherein the polypeptide acts as co-activator of an estrogen receptor, wherein the polynucleotide hybridizes under high stringency conditions to a nucleic acid having a sequence as set forth as SEQ ID NO: 1, or the complement thereof, and wherein high stringency conditions comprise hybridization at about 42 °C and about 50% formamide, a first wash at 65 °C, about 2X SSC and 1% SDS; followed by a second wash at about 65 °C and about 0.1 X SSC.

REMARKS

Claims 14, 18, 19, 20, 63, 74, 79, and 87 are amended herein, without prejudice to renewal for any subject matter deleted from the claims. Support for the amendment of claims 14-18 can be found in the specification on page 6, line 23 and on page 8, lines 26-37. Claim 62 and 63 are amended to place them in independent form. Support for the amendment of claim 74 can be found throughout the specification, specifically on page 6, line 31 to page 7, line 1, page 8, lines 16-25, and page 14, line 19 to page 15, line 10. Claim 79 is amended to correct dependency. Claim 87 is amended to place it in independent form, and to incorporate the limitations of canceled claim 61 and claim 55 (from which canceled claim 61 depended). Claims 13, 61, 62, 66-68, 75, 77 and 82 are canceled herein, without prejudice to renewal.